蝶と蛾 Tyô to Ga, 39 (2): 119-135, 1988

Descriptions of Japanese Coleophoridae I

Giorgio BALDIZZONE

Via Manzoni 24, 14100 Asti, Italia

and

Toshio Oku

Morioka Branch, Fruit Tree Research Station, Shimokuriyagawa, Morioka, 020-01 Japan

In Japan, twenty-five species of the family Coleophoridae have been recorded by ISSIKI (1950, 1957), MATSUMURA (1930), MEYRICK (1931, 1932, 1936), MORIUTI (1972, 1982), and OKU (1965, 1979). Among them, *Coleophora longi signella* MORIUTI is conspecific with *C. obducta* MEYRICK, and *C. tholoneura* MEYRICK with *C. versurella* Zeller (Baldizzone, 1985). Therefore, twenty-three Japanese species are known at present. However, they may represent only a part of the Japanese coleophorid fauna. In fact, we have found many other species of the family caught in Japan in some public and private collections. The present series of our studies aims to describe the new findings concerned. At first, four new species of the genus *Coleophora* are described here.

To denote the position of mouth opening in larval case, HERRICH-SCHÄFFER'S method is employed (see HERING, 1951, p.102). The type depositories are abbreviated as follows: EHU=Entomological Institute, Hokkaido University, Sapporo, Japan; USNM=U. S. National Museum, Smithsonian Institution, Washington D.C., USA; ZMH=Zoological Museum, University of Helsinki, Finland; BLDZ=private collection of the senior author; and PTK=private collection of Mr. H. PATZAK, Aschersleben, DDR.

Before going further, we wish to express our thanks to Drs. Donald R. DAVIS and R.W. Hodges, U. S. National Museum, Mr. Jukka Jalava, Zoological Museum, University of Helsinki, and Mr. Helmut Patzak, Aschersleben, for their kindness in loan of material.

Coleophora honshuella n. sp.

(Figs. 1 - 6, 27)

Expanse, 15 – 19 mm. Antenna creamy-white; scape with long ochreous scale-tuft; flagellum without darker annulation. Labial palpus whitish, rather short, the median joint being roughly as long as diameter of eye, and the terminal joint slightly

shorter than median joint. Fore wing moderate, pale ochreous-white in ground; strong subcostal streak from base to apical 4/5 of wing, short median streak from beyond middle of wing to below apex, and narrow anal streak shining leaden-white; dorsal streak of similar colour obscure or faded away; space between subcostal and median streaks ochreous-brown, darker towards apex, forming a so-called wedge-shaped streak; cilia ochreous-white, except for brownish apical part of wing. Hind wing greyish-brown; cilia light greyish-brown, paler towards its tip. Lower surface of wings greyish-brown, except for whitish apical 1/4 of costa and a whitish mark just on reversed side of median streak in fore wing. Abdomen and legs creamy-white.

Male genitalia (Figs. 1, 2, 6): Gnathos large and globular; tegumen wide, angularly concave at top, supported by wide and rather short ventral arms; transtilla thin and nearly horizontal; valva elongate, rounded apically, and slightly narrowed at basal half; valvula broad, with sinuate outer margin, and covered by setae more densely in costal and ventral areas; sacculus rather narrow, heavily chitinized ventrally, its terminal end forming an acutely angulated process; aedoeagus simple, elongate, and gradually tapering apically; cornuti thorn-like, about 20 or more in number, and arranged in a row.

Female genitalia (Figs. 4, 5): Papilla analis large and short; apophysis posterioris about 3 times as long as apophysis anterioris; subgenital plate trapezoidal, divided by large ostium bursae of chestnut shape; some strong spines of different lengths set along lateral margin of ostium bursae and around caudal end of subgenital plate; infundibulum shallow cup-like; ductus bursae sclerotized and spiculate at about initial 1/3, containing an internal strand, which reaches to convoluted mid part of ductus bursae; beyond the convolution, ductus bursae gradually widened towards ovate bursa copulatrix; signum strong, hook-like, pointed apically, and widened at base.

Abdominal tergites (Fig. 3): The 1st tergite with a pair of clumps of a few or several spinelets, its caudal rib having a proximal fold narrowed at middle and degenerated on both sides and a distal fold interrupted at middle; these folds more developed in female; paired patches of spinelets in the 2nd and 3rd tergites about twice longer than wide, and those in the 4th tergite more elongate.

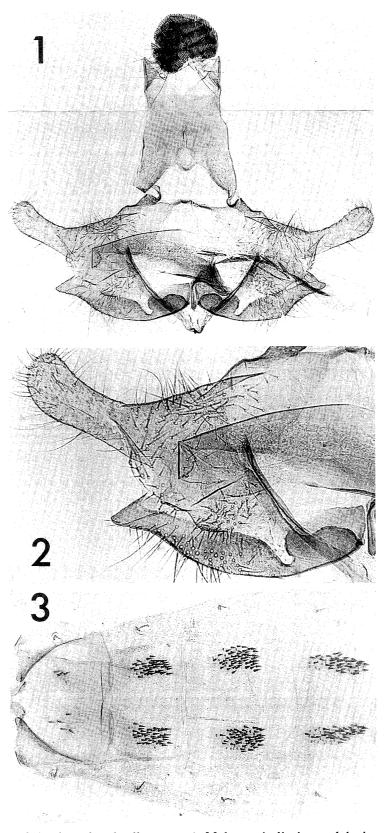
Mature larval case (Fig. 27) of subcylindrical sheath-type, 18-25 mm long, compressed laterally in particular towards bilobed anal end, before which dorsal edge is depressed; ventral keel present, but interrupted; colour brownish-grey, obscurely striped with darker and lighter tones; mouth 3.

Holotype: &, Kuriyagawa, Morioka, Iwate Pref., Honshu (1 VIII, 1966), T. Oku, from *Artemisia princeps* (EHU).

Paratypes: all collected at the same locality as the holotype by T. Oku; 13 (24 VII, 1964) from A. princeps; 432 (10 – 18 VIII, 1965) (EHU); 332 (1 – 5 VIII, 1966) from A. princeps (19, USNM; others, EHU); 13 (1 VIII, 1967) from A. princeps (BLDZ); 29 (20 – 21 VII, 1969) (EHU); 13 (4 VIII, 1975) from A. princeps (BLDZ).

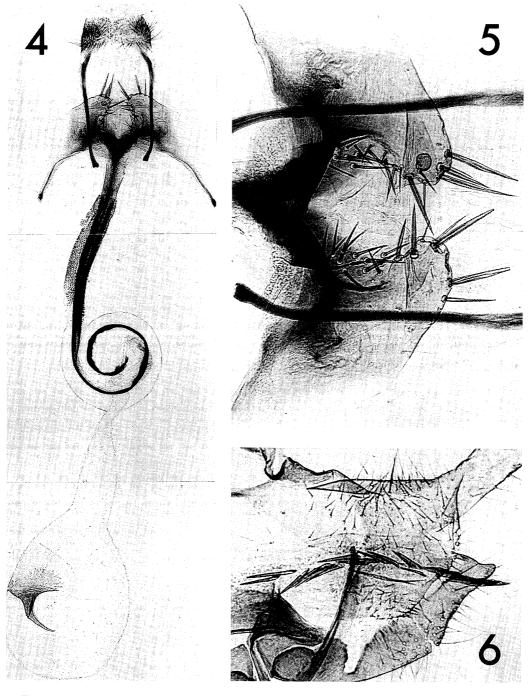
Host plant: Artemisia princeps.

Descriptions of Japanese Coleophoridae I



Figs. 1-3. *Coleophora honshuella* n. sp. 1. Male, genitalia in caudal view (PG-Bldz 6824); 2. *Ditto*, clasping organs enlarged; 3. *Ditto*, anterior segments of abdomen.





Figs. 4-6. *Coleophora honshuella* n. sp. 4. Female, genitalia in ventral view (PG-Bldz 6925); 5. *Ditto*, subgenital plate enlarged; 6. Male, cornuti enlarged (PG-Bldz 6824).

Distribution: Japan (Honshu).

Remarks. The new species apparently belongs to the 18th species-group of *Coleophora* defined by Toll (1952), and may be closely related to *C. helichrysiella* Krone, of which the genitalia have been illustrated by Baldizzone (1981). However,

C. honshuella is readily separated from *C. helichrysiella* by the following characters: in male, terminal process of sacculus much more protruded out, and cornuti much smaller and shorter; in female, ostium bursae furnished with many strong peripheral spines which are absent in *C. helichrysiella*, spiculate part of ductus bursae much shorter, and signum larger.

Larvae of *C. honshuella* make large transparent blotch-mines on leaves of *Artemisia princeps* during June. After fully fed, they fasten their cases on lower part of host stalks, and give rise to adults in late July to early August.

Coleophora issikii n. sp. (Figs. 7-12)

Coleophora pratella: Oku, 1979, Iwate-Mushinokai Kaiho 3: 18; Moriuti, 1982, Moths of Japan, 1: 263, 2: pl. 12, fig. 44 (nec Zeller, 1871, Sttet. Ent. Ztg. 1871: 71).

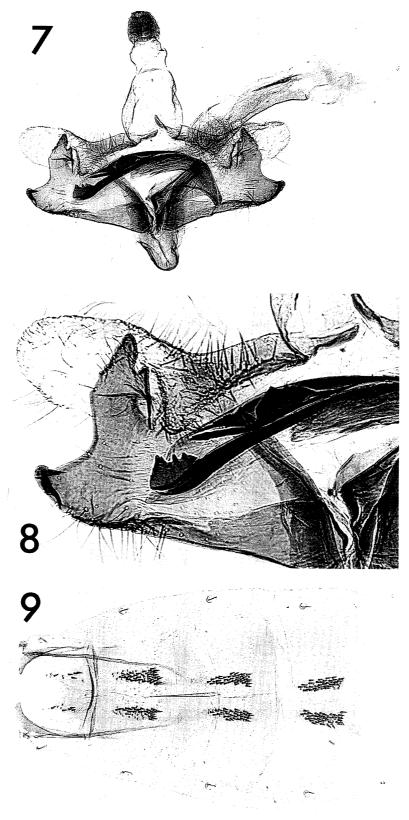
Expanse, 13-16mm. Antenna whitish-ochreous, with no or indistinct darker annulation. Labial palpus ochreous-brown externally, the median joint being margined with whitish colour above and below, about 1.5 times as long as diameter of eye, with a shortly projected ventro-apical tuft, and the terminal joint whitish apically, longer than 1/2 of median joint. Head and thorax whitish-ochreous, darker on vertex. Fore wing moderate, light brown in ground, more or less tinged with grey around apex and often dorsally, sharply streaked with ochreous-white, without darker dots; costal streak broader, extending to apex, and often edged with greyish-brown along extreme costa towards base; upper discal streak hardly reaching to base of wing; lower discal streak and its branches separated by an interruption; streak along fold narrow, faded away beyond middle; dorsal streak marked throughout; cilia pale cinereous-brown. Hind wing brownish-grey, with cilia of lighter colour. Abdomen whitish-ochreous. Legs whitish-ochreous; hind tibia streaked with greyish-brown externally.

Male genitalia (Figs. 7, 8, 12): Gnathos small, globular; tegumen rather small, supported by elongate ventral arms; transtilla strong, in inverted V-shape; valva large, semi-ovate; valvula subtriangular, rounded at lower end, covered with heavily chitinized setae; sacculus large, the ventral margin being almost straight and ending in a robust, subtriangular ventro-caudal process; an upright dorso-caudal protuberance present inwards to the ventro-caudal process, its top being finger-like in shape, irregularly notched externally and furnished with a smaller tooth internally; aedoeagus asymmetrical, composed of shorter prong with a large subtriangular plate at its middle, and longer one possessing an irregularly denticulate plate at its top above; cornuti (Fig. 12) small, curved thorn-like, about 10 in number, brought in a compact linage.

Female genitalia (Figs. 10, 11): Papilla analis small, narrow and elongate; apophysis posterioris about 5 times as long as apophysis anterioris; subgenital plate elongate semitrapezoidal, caudally divided by U-shaped ostium bursae; infundibulum

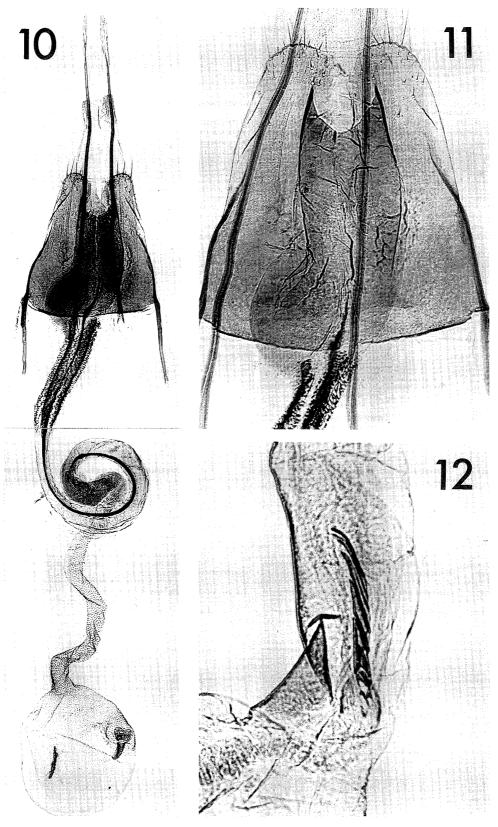
124

Giorgio BALDIZZONE and Toshio OKU



Figs. 7-9. *Coleophora issikii* n. sp. 7. Male, genitalia in caudal view (PG-Bldz 8263); 8. *Ditto*, clasping organs and apical part of aedoeagus enlarged; 9. *Ditto*, anterior segments of abdomen.

Descriptions of Japanese Coleophoridae I



Figs. 10 – 12. *Coleophora issikii* n. sp. 10. Female, genitalia in ventral view (PG-Bldz 8261); 11. Female, subgenital plate enlarged (PG-Bldz 6969); 12. Male, cornuti enlarged (PG-Bldz 8274).

asymmetrical, as long as subgenital plate, more than twice longer than wide, with a large rounded swelling on one side of its distal end; ductus bursae spiculate at its initial 1/3, with an internal strand reaching up to convoluted mid part; beyond the convolution, ductus bursae transparent; bursa copulatrix globular; signum stout horn-like, dilated at base in cotyledonous shape, and followed with an isolated, narrow prickly plate.

Abdominal tergites (Fig. 9): The 1st tergite with a pair of longitudinal rows of about 10 or more spinelets, the caudal rib having a narrow but distinct proximal fold and a distal fold much narrowed at middle; paired patches of spinelets in the following tergites rather compact, much elongate, 5 times or more longer than wide.

Larval case unknown.

Holotype: &, Sodeyama, Iwate Pref., Honshu (10 VIII, 1970), T. OKU (EHU).

Paratypes: Honshu—1♂18♀ (30 VIII, 1966) Yakeyama, Towada, Aomori Pref., T. OKU (2♀, PTK; others, EHU); 3♂ (26 VIII, 1969) Hosono, Iwate Pref., T. OKU (EHU); 1♀ (17 VIII, 1967) Morioka, Iwate Pref., T. OKU (EHU); 3♀ (7 VIII, 1984) Yakebashiri, Mt. Iwatesan, Iwate Pref., T. OKU (EHU); 1♂2♀ (19 VIII, 1964) Shinobu-takayu, Fukushima Pref., T. OKU (EHU); 1♀ (7 VIII, 1934) Yumoto, Tochigi Pref., S. Issiki (USNM); 2♂3♀ (7−8 VIII, 1987) Katashina, Gunma Pref., T. OKU (EHU); 1♂1♀ (12 IX, 1974) Izu-Ito, Tokai (Shizuoka Pref.), S. Issiki (USNM); 3♂3♀ (17 VIII, 1953) & 2♀ (6 IX, 1953) Karuizawa, Nagano Pref., P. SAVOLAINEN (1♂2♀, BLDZ; others, ZMH); 1♂ (19 VIII, 1953) Utsukushigahara, Nagano Pref., A. MUTUURA (EHU); 1♂ (16 IX, 1950) Iwawaki-san, Wakayama Pref., S. Issiki (BLDZ).

Host plant: Unknown.

Distribution: Japan (Honshu).

Remarks. The species has been recorded provisionally as Coleophora pratella Zeller in accordance with suggestion by Mr. Patzak (Oku, 1979; Moriuti, 1982). After careful examination, however, we have come to the conclusion that this form is a new species in the therinella-section of the 30th species-group of the genus (Toll, 1952), where C. pratella is also included. The male genitalia of C. issikii are similar to those of C. pandionella Baldizzone (MS), but the former has the following distinction from the latter: ventro-caudal process of sacculus stouter, upright dorsal protuberance of sacculus narrower with an internal tooth, and aedoeagus shorter with appendant plates of different shape. In the female genitalia, C. issikii has little similarity to the representatives of the therinella-section. In comparison with C. therinella Tengström, which has been known in Japan (Oku, 1979), the following differences can be pointed out: subgenital plate and infundibulum much longer, while ostium bursae narrower.

Adults of *C. issikii* are attracted to light mainly during August in northern and central Japan. In more south, the flight period is extended to mid September.

Coleophora levantis n. sp. (Figs. 13 – 16, 28, 29)

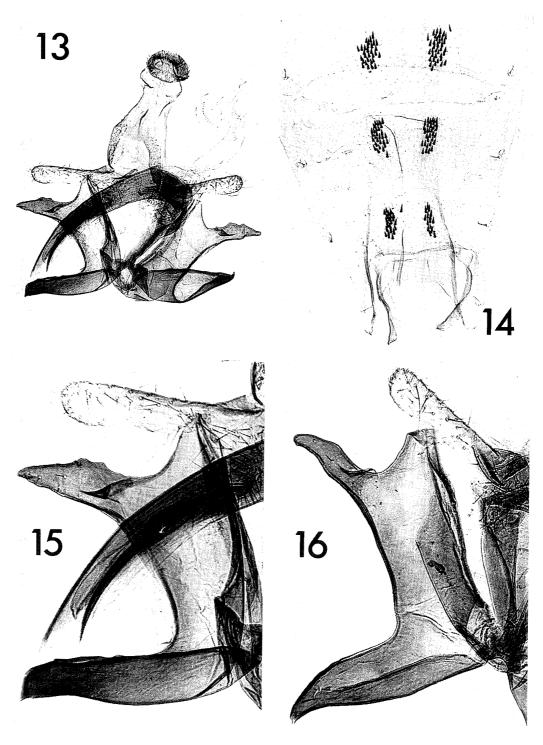
Expanse, 11–14 mm. Antenna simple; scape and basal three joints of flagellum brownish-ochreous; remainder of flagellum whitish, with distinct brownish-grey annulation, which is paler towards base. Labial palpus externally greyish-brown in male, and ochreous-brown in female, the median joint being somewhat longer than diameter of eye, and the terminal joint slightly shorter than median joint. Head and thorax brownish-ochreous, more or less tinged with cinereous-grey. Fore wing rather elongate; costa almost straight up to base of costo-apical fringe; colour ochreous-brown, tinged with grey more strongly in male, without markings and dots; cilia lighter in colour, more greyish towards its tip. Hind wing brownish-grey, with cilia of same colour. Lower surface of wings browish-grey, paler in female especially around apex of fore wing. Abdomen light cinereous-grey. Legs pale greyish-ochreous.

Male genitalia (Figs. 13, 15, 16): Gnathos large and globular; tegumen narrow and elongate, constricted above middle, furnished with a pair of small upper arms, and supported by rather short ventral arms; transtilla small, in inverted V-shape; valva very narrow and elongate; valvula small, rounded, and evenly bristled; sacculus very short and wide, strongly sclerotized; a strong horn-like projection arising from ventro-caudal end of sacculus and another shorter one from above middle of its outer edge; the latter having irregular dentation above and a flattened tooth at base; aedoeagus very long, gradually arched; cornutus elongate, roughly as long as a half of aedoeagus.

Female genitalia (Figs. 17 – 19): Papilla analis rather narrow, elongate; apophysis posterioris about 2.5 times as long as apophysis anterioris; subgenital plate large, semitrapezoidal, shallowly concave at middle of its caudal margin; ostium bursae semioval, with chitinized margin interrupted in front of caudal concavity of subgenital plate; long setae arranged along caudal margin of subgenital plate and sides of ostium bursae; a gigantic transverse flap erected from middle of subgenital plate (depressed on slide in Figs. 17, 18), the basal edge sinously extending over total width of subgenital plate across ostium bursae, and the distal edge rounded and semicircularly swollen out at middle; infundibulum cylindrical, not or only weakly sclerotized; ductus bursae without internal strand, slightly chitinized just before its twisted part at 2/5 from ostium bursae, where it forms a globe-like lateral swelling (Fig. 19) and connects with ductus seminalis; bursa copulatrix semiovate; signum small, with a blunt basal hook.

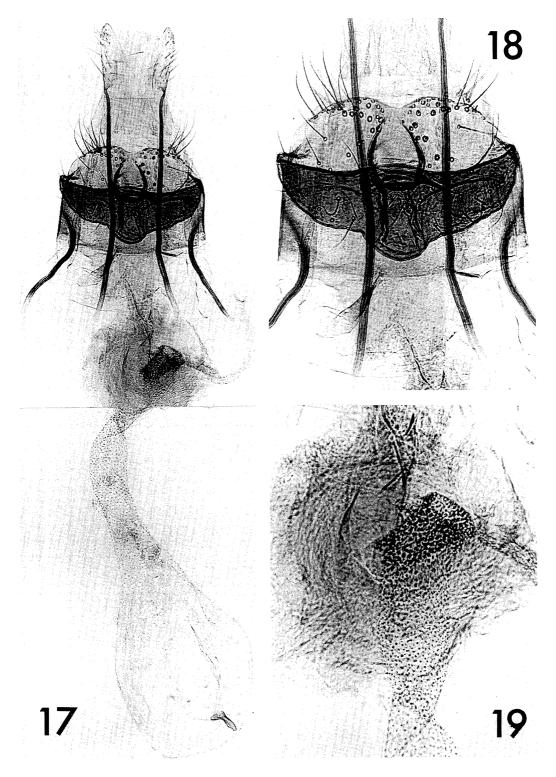
Abdominal tergites (Fig. 14): The 1st tergite not bristled, the caudal rib having a rudimental proximal fold and a distal fold somewhat narrowed at middle and degenerated on extreme sides; paired patches of spinelets in the following tergites rather compact, about twice or more longer than wide.

Hibernal case for younger larva (Fig. 28) of a curved sheath-type, 4 – 5 mm long, smooth, light brownish-grey, with a pale-coloured ventral keel; mouth 2. Spring case



Figs. 13-16. *Coleophora levantis* n. sp. 13. Male, genitalia in caudal view (PG-Bldz 8267); 14. *Ditto*, anterior segments of abdomen; 15. *Ditto*, clasping organs and aedoeagus enlarged; 16. Male, clasping organs enlarged (PG-Bldz 8331).

Descriptions of Japanese Coleophoridae I



Figs. 17 – 19. *Coleophora levantis* n. sp. 17. Female, genitalia in ventral view (PG-Bldz 8269); 18. *Ditto*, subgenital plate enlarged; 19. *Ditto*, subbasal swelling of ductus bursae enlarged.

130

for older larva (Fig.29) tubular, 6-7 mm long, almost straight, densely covered with light greyish-yellow hairs, with trilobed anal end; mouth 4.

Holotype: &, Kuzakai, Iwate Pref., Honshu (18 VI, 1968), T. Oku, from Quercus mongolica var. grosserrata (EHU).

Paratypes: Honshu—3♂4♀ (18-21 VI, 1968) (1♀, BLDZ; others, EHU) and 2 ♂(4 VII, 1966) Kuzakai, Iwate Pref., T. OKU, from Q. mongolica var. grosserrata (EHU); 1♀ (21 VI, 1970) Takizawa, Iwate Pref., T. OKU, from Q. serrata (EHU); 1 ♂2♀ (17 VII, 1953) Karuizawa, Nagano Pref., P. SAVOLAINEN (1♂1♀, BLDZ; 1♀, ZMH); 1♀ (25 VI, 1966) Mt. Hira, Shiga Pref., T. YASUDA, from Q. mongolica var. grosserrata (EHU).

Host plant: Quercus mongolica var. grosserrata and Q. serrata.

Distribution: Japan (Honshu).

Remarks. The present form has monotonously coloured fore wings, as are the ordinary cases in the 2nd species-group of Coleophora (Toll, 1952, 1962). Despite this, the male genitalic structure suggests that the species may belong to the 7th species-group in the sense of Toll (1962), of which the known representatives are sprinkled with darker scales on lighter-coloured fore wings. In particular, C. levantis seems to be related to C. tadzhikiella Danilevskii on account of the following characters common to them: valva very long and narrow, ventro-caudal projection of sacculus well developed, and tegumen constricted above middle in male (Danilevskii, 1955; Toll, 1962). However, C. levantis clearly differs from C. tadzhikiella in having an additional horn-like projection from above middle of sacculus besides the ventro-caudal one. With regard to the female genitalia, C. levantis is characterized by the presence of an errected flep across over the subgenital plate, which may permit distinction from other species of the same genus.

Young larvae bearing hibernal sheath-cases feed on sprouting buds of deciduous *Quercus* early in spring. After that, they cast off the hibernal cases and construct new ones of tubular-type with densely haired fractions of the host leaves. The older larvae feed only on the upper surface of extended leaves without making mines. Before pupation, they fasten their cases usually onto the midrib in upper leaf-surface. Adults are found during July in the field.

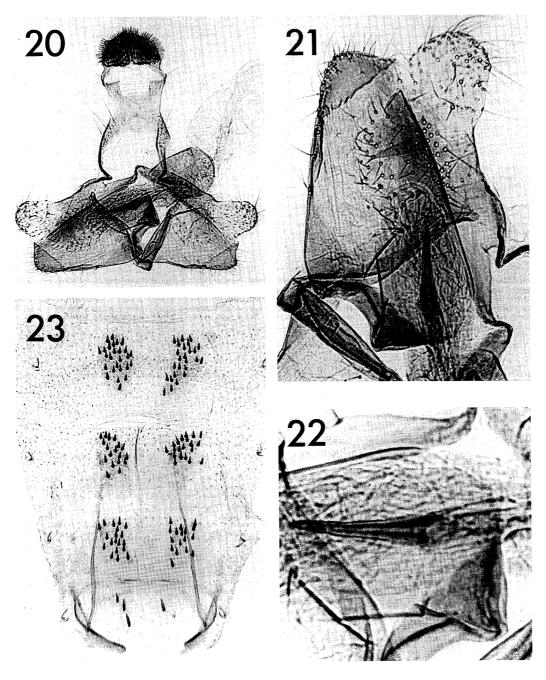
Coleophora eteropennella n. sp.

(Figs. 20 - 26, 30, 31)

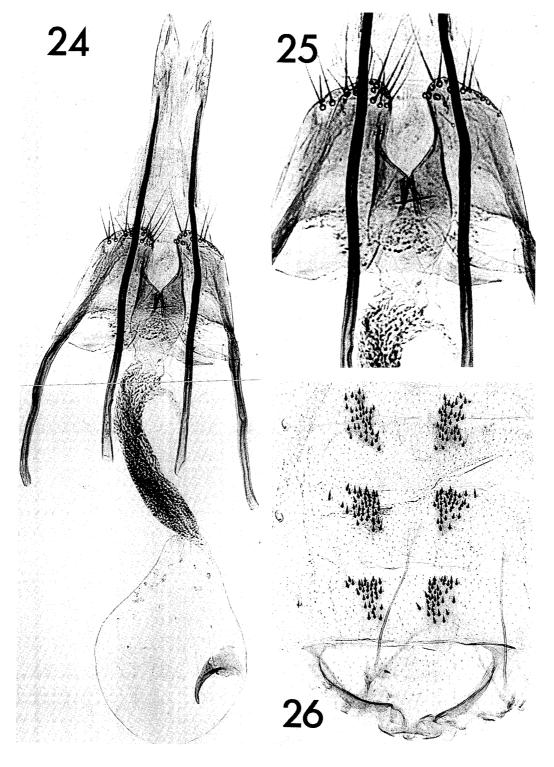
Expanse, 11-13 mm. Antenna simple; scape pale greyish-brown to dark brownish-grey; flagellum cinereous-white, more or less tinged with darker colour in a few basal joints, and annulated with greyish-brown distinctly. Labial palpus brownish-grey, the median joint being about 1.5 times as long as diameter of eye, and the terminal joint slightly shorter than median joint. Head and thorax greyish-ochreous to dark brownish-grey. Fore wing moderate, pale greyish-ochreous to dark

brownish-grey, without markings; cilia brownish-grey. Abdomen light ochreous-grey. Legs pale brownish-grey.

Male genitalia (Figs. 20-22): Gnathos very large, semioval; tegumen subcylindrical, rectangularly concave at top, supported by long ventral arms; transtilla strong, in inverted V-shape; valva short, nearly as long as wide, rounded apically; valvula



Figs. 20 – 23. *Coleophora eteropennella* n. sp. 20. Male, genitalia in caudal view (PG-Bldz 8329); 21. *Ditto*, clasping organs enlarged; 22. *Ditto*, cornutus enlarged; 23. *Ditto*, anterior segments of abdomen.



Figs. 24 – 26. *Coleophora eteropennella* n. sp. 24. Female, genitalia in ventral view (PG-Bldz 8330); 25. *Ditto*, subgenital plate enlarged; 26. *Ditto*, anterior segments of abdomen.

little specialized, merely indicated by a bristled space at base of valva; sacculus simple, heavily chitinized at its obtuse ventro-caudal angle, with ventral margin almost straight; aedoeagus gigantic, rather wide, little curved; cornutus of a stout thorn (Fig. 22).

Female genitalia (Figs. 24, 25): Papilla analis rather narrow and elongate; apophysis posterioris about 2.5 times as long as apophysis anterioris; subgenital plate semitrapezoidal, deeply cleft by ostium bursae of an acorn-shape, furnished with setae along rounded caudal margin; infundibulum longer than wide, constricted towards conjunction with ductus bursae, which is rather short, not convoluted, finely spiculate almost along its total length, without internal strand; bursa copulatrix large, in shape of an European pear-fruit; signum horn-like, dilated at base in a cotyledonous shape.

Abdominal tergites (Figs. 23, 26): The 1st tergite with a pair of clumps of very few spinelets, one of which is often absent; caudal rib of the 1st tergite narrow, having rudimental proximal and distal folds; paired patches of spinelets in the following tergites irregular in shape, usually longer than wide, bristled more densely in female.

Mature larval cases tubular, but varied in shape and colour with host plant. On Ulmus, the case (Fig. 30) stout, 4-6 mm long, without dorsal keel; upper one of three terminal lobes prominently projected out above and pointed; colour dark reddishbrown, edged with brownish-white caudally; a large dark greyish dorsal patch extending from mouth to caudal 1/5; mouth 1 or 2. On Betula, the case (Fig. 31) about 6 mm long, with simple trilobed end, and with a rudimentary dorsal keel, which is represented by indented margin of leaf-piece used; colour monotonous reddishbrown; mouth 3.

Holotype: ♂, Sapporo, Hokkaido (30 VI, 1961) T. OKU, from Betula platyphylla var. japonica (EHU).

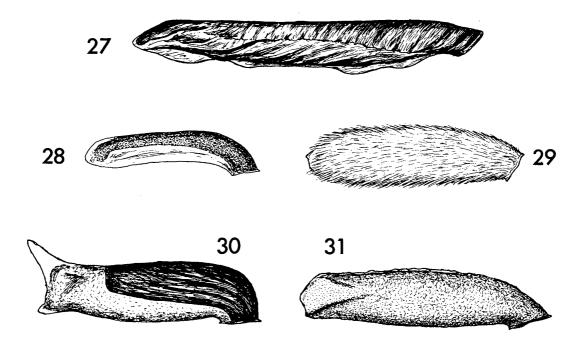
Paratypes: Hokkaido — all collected at the same locality as the holotype by T. OKU; 19 (29 VI, 1956), 23129 (9-12 VI, 1963), and 13 (9 VII, 1965) from *Ulmus davidiana* var *japonica* (13, BLDZ; others, EHU); 4319 (30 VI-9 VII, 1963) from *B. platyphylla* var. *japonica* (EHU). Honshu—2329 (13-19 VI, 1969) Kuzakai, Iwate Pref., T. OKU, from *U. davidiana* var *japonica* (19, BLDZ; others, EHU).

Host plant: Ulmus davidiana var. japonica and Betula platyphylla var. japonica. Distribution: Japan (Hokkaido, Honshu).

Remarks. Adults of the present new species are variable in colour. The more greyish specimens are superficially similar to Coleophora serratella Linnaeus (= fuscedinella Zeller), with which C. eteropennella occasionally occurs together on Betula. Furthermore, the larval cases of these two species found on Betula are hardly distinguishable by shape and colour. Notwithstanding all these facts, C. eteropennella is so much peculiar in genitalic structure as to avoid confusion with C. serratella and other allied species. Perhaps, C. eteropennella belongs to the 2nd species-group of Coleophora (Toll, 1952, 1962), but it is difficult to determine its taxonomic relation to the other representatives of the species-group, because it has such the peculiarity as very short valva, extraordinarily large aedoeagus, rounded ventro-caudal angle of

134

Giorgio BALDIZZONE and Toshio OKU



Figs. 27-31. Larval cases of *Coleophora* n. spp. 27. *C. honshuella* n. sp., mature larval case; 28 & 29. *C. levantis* n. sp., cases for young and mature larvae, respectively; 30 & 31. *C. eteropennella* n. sp., mature larval cases on *Ulmus* and *Betula*, respectively.

sacculus, etc.

Larvae make ordinary transparent blotch-mines on leaves of *Ulmus* and locally of *Betula* during May and early June. It is noted that the larval case is variable in shape and colour with host plant. Mature larvae fasten their cases on twigs or upper surfaces of leaves. Adults appear in late June and July.

References

Baldizzone, G., 1981. Contribuzioni alla conoscenza dei Coleophoridae XXIV. Le specie descritte da W. Krone, J. Mann, K. Prohaska, H. Zerny. *Folia Ent. Hung.* 34: 5-12

BALDIZZONE, G., 1985. Nuove sinonimie nel genere "Coleophora" HÜBNER (IV). Contribuzioni alla conoscenza dei Coleophoridae XL. Riv. Piem. St. Nat. 6: 181-198.

Danilevskii, A.S., 1955. New species of Microlepidoptera injurious to trees and shrubs in Central Asia. *Ent. Obozr.* 34: 108-123. (In Russian.)

HERING, E.M., 1951. Biology of the leaf miners. Junk, Gravenhage, 420 pp.

Issiki, S., 1950. Coleophoridae. *In Esaki et al., Iconographia Insectorum Japonicorum* 2nd ed.: 454 – 455. Hokuryukan, Tokyo.

Matsumura S., 1930. 6000 illustrated insects of Japan-empire. Toe-shoin, Tokyo, 1488 pp.

MEYRICK, E., 1931. Exotic Microlepidoptera 4 (6): 161-192.

- MORIUTI, S., 1972. Two new economically important species of Microlepidoptera infesting larch in Japan (Lepidoptera: Coleophoridae and Tortricidae). *Kontyû*, *Tokyo* 40: 254 262.
- OKU, T., 1965. Descriptions of nine new species of the genus *Coleophora* from Japan, with notes on other species (Lepidoptera: Coleophoridae). *Ins. Mats.* 27: 114-124, 4 pls.
- 1979. Records of three Coleophora species. Iwate-Mushinokai Kaiho 3:18. (In Japanese.)
- Toll, S., 1952. Rodzina Eupistidae polski. Docum. Physiogr. Polon. 32: 292 pp., 38 pls.

摘要

日本産ツツミノガ科の記載 I (G. BALDIZZONE・奥 俊夫)

下記のツツミノガ科の4新種を記載した。

Coleophora honshuella BALDIZZONE et OKU ヨモギオオツツミノガ(新称)

幼虫は長大な灰褐色の鞘状巣を有し、春にヨモギの葉に潜る。成虫は7~8月に出現、触角基部の毛束が発達、白黄土色の前翅に鉛白色の3条紋と黄褐色の1条紋がある。岩手県(盛岡)以外では未発見。

C. issikii BALDIZZONE et OKU ウスシロミャクツツミノガ

従来, C. pratella Z_{ELLER} とされていたが別種。青森県から和歌山県までの山地で、 $8 \sim 9$ 月に灯火に飛来、普通種だが寄主植物は未知。

C. levantis BALDIZZONE et OKUナラツツミノガ(新称)

幼虫はミズナラ, コナラに発生. 当初は曲がった鞘状巣を有するが, 越冬後に多毛の筒状巣を形成, 葉上面をなめるように食し, 潜棄習性なし. 成虫は7月に出現. 触角は基部数節のみ黄褐色, それより先は白く暗色輪紋がある. 前翅は灰色をおびた黄土褐色. 岩手, 長野, 滋賀各県で発見.

C. eteropennella BALDIZZONE et OKU フタイロツツミノガ(新称)

幼虫の筒状巣は寄主植物によって形状が異なり、春にハルニレ、シラカバの葉に潜る。成虫は6~7月に羽化、前翅は暗褐灰色から淡灰黄土色まで変異がある。暗色の個体はシラカバツツミノガに近似し、外観では識別困難。北海道及び岩手県で発見。